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## What is Claimed is:

1. A protein chip of a S-L-SP form wherein a substrate peptide (SP) is immobilized on a solid substrate (S) by the mediation of a linker protein (L).

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- 2. The protein chip according to claim 1, wherein the linker protein is leptin or malic enzyme.
- 3. The protein chip according to claim 1, wherein the substrate peptide is fused with the linker protein in the form of a peptide monomer, a dimer of monomer-proline-monomer, or a multimer where monomers are linked to each other by a proline.
- 4. The protein chip according to claim 3, wherein the peptide monomer is kemptide(SEQ ID NO: 1) or Ab1(SEQ ID NO: 8).
  - 5. The protein chip according to claim 1, wherein the solid substrate is a slide with exposed aldehyde.
- 20 6. A method for analyzing the interaction between a reactive protein and its substrate peptide using the protein chip of claim 1 comprises the steps of:
  - (a) adding a reactive protein to the protein chip, the reactive protein showing a specific interaction with the substrate peptide immobilized on the protein chip; and
- 25 (b) detecting the interaction between the reactive protein and the substrate peptide.
  - 7. The method according to claim 6, wherein the reactive protein is an enzyme or an antibody.

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8. The method according to claim 7, wherein the enzyme is protein kinase A or Ab1 kinase.

9. The method according to claim 6, wherein the step of detecting the interaction between the substrate peptide and the reactive protein is carried out by using a fluorescence labeled antibody.

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The method according to claim 8, wherein the step of detecting a phosphorylation of the substrate peptide by kinase is carried out by using a Cy3-labeled anti-phosphorylation serine antibody or a Cy5-labeled anti-phosphorylation tyrosine antibody.